



## New Look and Feel for WING, Today@Glenn

of redesigning Glenn's internal Web presence, the expression is aptly fitting as well.

It has been 10 years since the Web Intranet at Glenn (WING) and Today@Glenn

(T@G) Web sites debuted at NASA Glenn. While minimal enhancements and improvements have been made to both sites on an ongoing basis, rapid advances in Web technology have made the Web pages obsolete. Changes are on the way, however.

In April, Glenn staff began seeing the first of many improvements to WING and T@G, as well as a new Center Director's Corner with agency information and center goals and objectives, Key Events and archives of the DLT Notes and 90-Day Reports.

"Given the fact that WING and T@G are over 10 years old, it is definitely time for a face-lift," notes Dr. Sasi Pillay, Chief Information Officer at Glenn. "Our goal is to make Glenn's Intranet more user friendly and provide employees with a valuable Web resource that allows them to do their jobs easier and faster."

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Graphic by Laurie Yost

"Consider it a work in progress." It is a familiar expression we all use from time to time to describe a task we are involved with on the job or at home. When it comes to the challenging task

### Wings of Excellence

## FEB Honors Their Peers in Public Service

The Cleveland Federal Executive Board (FEB) honored nine Glenn employees for their outstanding service in the workplace and as goodwill ambassadors in their communities during the 2008 FEB Wings of Excellence Award luncheon on May 8.

Senator George Voinovich acknowledged the contributions of the following award recipients in his keynote address:

Rhonda Arterberrie, Enterprise Applications Office, for demonstrating passion and ability to quickly translate customer needs to viable solutions as a Knowledge Management and Collaboration consultant; and for volunteering for the local Boys Town Group to develop and implement several life-skills workshops, in addition to fundraising for a variety of charitable organizations throughout the Greater Cleveland area.

Nola Bland, Human Capital Development Branch, for exceptional support of Glenn's goal—to be an integral part of the community—in aiding the development of future leaders as director of the Cleveland Federal Community Leadership Institute; and for devoting significant effort in guiding children and young adults as a board member for the Oberlin Early Childhood Center and as a mentor for Glenn's Summer Intern Program.

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Slider visits the 10-by 10 to promote NASA Night.

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# Wings of Excellence

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Lindsey Flash, Flight Software Engineering Branch, for exceptional customer service and dedication to developing quality agency and center Web-based applications such as NASA's Speakers Bureau Database; and for effective leadership as co-chair of Glenn's Culture Survey Employee Feedback Committee that made recommendations to Glenn senior management for improving the center's organizational culture. Flash also volunteers for numerous center outreach activities.

Scott Graham, chief of Glenn's Launch Systems Project Office, for model leadership managing all of the \$60 million Ares launch vehicle projects at the center and the more than 150 full-time employees (including Cleveland-based trade workers) devoted primarily to developing the Upper Stage Simulator, a critical piece of flight hardware for the initial Ares I test flight.

Frederic Holland, Mechanics and Life Prediction Branch, for his exemplary public service balancing technical work at NASA with community outreach to Greater Cleveland and the world at large, including volunteering as a Loaned Executive to the Combined Federal Campaign, earning Glenn's 2008 "High School

Mentor of the Year" award, promoting volunteer community service at a national forum and performing international mission work.

Gloria Richards, Power and In-Space Propulsion Division, for sustained outstanding achievement and excellence in leading high-performance teams and major efforts, such as chair of Glenn's Women's Advisory Group supporting Cleveland's "Dress for Success" charity, and more recently, chairwoman for Glenn's 2008 Combined Federal Campaign, which far exceeded the center's monetary and employee participation goals.

Dr. Kim Veris, Technology Transfer and Partnership Office, for outstanding leadership as a critical member of a statewide steering committee for the inaugural Ohio Aerospace Day involving Ohio's Governor and General Assembly in an effort to increase the public and state government awareness of Ohio's aerospace capabilities; and for conceiving and organizing a highly successful meeting with the

President of the Ohio Senate and NASA staff, as part of a NASA Future Forum that highlighted NASA and its contributions to Ohio and the Nation.

Mark Woodling, Program Management Office, Facilities Division, for consistently demonstrating leadership, technical excellence, exceptional customer service and dedication to quality in center and agency Construction of Facilities program management, Real Property management and space management functions; and for co-chairing the Center Culture Survey Employee Feedback Committee, which made recommendations to center senior management for improving Glenn's organizational culture.

Ralph Zerick, Program and Project Assurance Division, for outstanding and enthusiastic leadership as data manager for Glenn's Lessons Learned Program, an important agency program addressing Columbia Accident Investigation Board findings. Zerick established Glenn's Lessons Learned Committee, trained Glenn personnel and brought the center into compliance with NASA Policy earning Glenn's program recognition as one of the best in the agency.

—EDITED BY S. JENISE VERIS



Arterberrie



Bland



Flash



Graham



Holland



Richards



Veris



Woodling



Zerick

## Exploration Showcased Through the Arts

Glenn reached out to the public through the arts during concerts at two sites in Ohio over two weekends. Speakers Bureau presentations at Delaware local schools helped create awe in advance of the Central Ohio Symphony's two sold-out performances of Gustav Holt's "The Planets" and a "Star Wars" suite during the weekend of Feb. 28 to March 1. Then, on March 28, Glenn joined the progressive rock band, Rocket Scientists, at a special performance in Lakewood, celebrating the 40<sup>th</sup> anniversary of the Apollo lunar landing. Prior to the concert, the band toured several of Glenn's research facilities. At the concert, they performed



*The Rocket Scientist' Apollo tribute.*

the song "Sky Full of Stars," with a video tribute to the Apollo 11 mission projected on a screen in the background. After each of these concerts, fans eagerly posed for pictures with a space suit replica and browsed a NASA display.



## Propelling Glenn Forward: Our Center Directors

# Dr. Abe Silverstein's Contributions Abundant

*This is the second in a series of articles spotlighting NASA Glenn's center directors.*

A rose by any other name may smell as sweet. But would a mission to the moon named "Pegasus" have the same appeal as Apollo? Thanks to Dr. Abe Silverstein, former director of NASA Glenn, we'll never know. Silverstein named Mercury and Apollo after mythical Greek gods while he was serving as NASA's Director of Space Flight Programs in the late 1950s.

He left his mark on the agency—not only by naming its first human space flight missions, but also by demonstrating legendary leadership, innovation and enthusiasm throughout his career.

Silverstein began his career in 1929 with the National Advisory Committee for Aeronautics (NACA) at Langley Field, where he helped design the Full Scale Wind Tunnel. That tunnel increased performance of World War II aircraft.

He transferred to Cleveland's Aircraft Engine Research Laboratory, now Glenn, in 1943 to oversee the new Altitude Wind Tunnel. As Chief of the Wind Tunnel and Flight Division, he directed propulsion research that led to improvements in turbojet aircraft engines. He also designed and constructed the laboratory's first supersonic propulsion wind tunnels. The 8-by-6 and 10-by-10 foot tunnels

contributed to the development of the supersonic aircraft.

Silverstein was named Director of Research in 1949 and Associate Director in 1953. In these roles he championed alternative propulsion methods such as nuclear propulsion, the ion engine and high-energy liquid propellants, like liquid-hydrogen.

In 1958, Silverstein was called to serve at NACA headquarters in Washington, D.C. He and his colleagues transformed NACA into NASA, and he became Director of Space Flight Programs. In this position, he planned and directed the nation's first space flight missions, which he named Mercury and Apollo, after ancient Greek gods.

According to Glenn archivist Bob Arrighi, WYLE/History Office, Silverstein's role in advancing Lewis and the early space program in general can hardly be overstated. Silverstein combined his technical acumen with a broad vision of the future of aeronautics and space.

"Silverstein was a genius at instantly grasping the essence of a problem, proposing a solution and delegating the task to the experts at the lab to resolve," Arrighi said.



*Dr. Abe Silverstein*

In 1961, Silverstein returned to Cleveland and took the

helm of Lewis as its director. He was a driving force behind Centaur, the country's first high-energy upper-stage rocket. Centaur launched the Surveyor robotic spacecraft to the moon and launched Mariner, Pioneer, Viking and Voyager as well as numerous satellites. He retired eight years later.

In 1997 Silverstein received the prestigious Guggenheim Medal for his "technical contributions in advancing technology of aircraft." He died four years later at the age of 92.

"Silverstein influenced the development of the first American jet engines and ramjets, the use of liquid-hydrogen as a propellant, the Centaur rocket and many of the early space missions," Arrighi said. "He contributed to the creation of Glenn's supersonic tunnels and to the foundation of NASA itself. Any one of these items would have been an important accomplishment on its own."

—BY EMILY KENNARD  
LERCIP INTERN

## New WING, Today@Glenn Phases In

Continued from page 1

### A Three-Phased Approach

The WING/T@G redesign team is tackling its to-do list in three phases. The first phase, which gives users a taste of what is coming down the road, primarily involves visual changes. The appearance of WING will change to the NASA Portal "look and feel." Phase 1 also merges the T@G (headlines only) within the WING home page. Until phase 2 is released, however, users will need to click the "More News" button located in the "Today@Glenn Headlines" box to read the daily news bulletin.

Phase 2 involves reviewing and updating existing links on WING, as well as making substantial changes to T@G. Current phase 2 plans call for fully integrating the news bulletin into the WING home page, as well as calling out new messages and changing the posting rules to reduce repetitive messages. Other planned enhancements include highlighting special events and offering an unsubscribe option for the T@G daily e-mail message.

The third and final phase will focus on allowing employees to tailor their WING home page to their individual needs.

This phase will include features such as enabling an Outlook calendar sync, integrating the various center and agency calendars and developing a version of the site suitable for viewing on PDAs.

When will each phase be implemented? The redesign team's production schedule is as follows: phase 1 release in April 2009; phase 2 in summer 2009; and some phase 3 features in late fall 2009. Completion of phases 2 and 3 will depend on staff availability and workloads. Stay tuned to T@G for information on the redesign project.

—BY KELLY R. DIFRANCESCO

# Robotics Systems Demonstrated for Homeland Security Applications

Glenn's Optical Instrumentation and NDE Branch's Mobile and Remote Sensing (MARS) laboratory team is working with the Department of Homeland Security to transfer Glenn robotics and sensor technologies to local law enforcement. The MARS team has conducted several demonstrations to prove that robotics systems are capable of responding to weapons of mass destruction/chemical, biological, radiological or nuclear and HAZMAT threats.

In February, MARS personnel met with representatives from the local Department of Homeland Security (DHS) and the Greater Cleveland Regional

Transit Authority (RTA) police to discuss the need for robotics systems capable of boarding and inspecting an interior of a bus, according to George Baaklini, Glenn's Optical Instrumentation and NDE Branch chief. As a result of that meeting, the MARS team developed a technique to address this need.

The MARS team, along with Glenn's Business Development & Partnership Office and the Ohio Aerospace Institute (OAI), is also working with local law enforcement to identify opportunities where Glenn's cutting-edge robotics and sensor technologies might benefit the first responder community. During a recent workshop at OAI on March 27, MARS and the Case Western Reserve University Center for Biologically Inspired Robotics



C-2009-982

Photo by Bridget Caswell

*Mike Krasowski, MARS team lead, explains how robots can save lives. The mother robot sends her child, the smaller robot, as the first responder to inspect the bus.*

Research demonstrated a unique, easily customized family of robotics and robotic capabilities. Requirements and applications were discussed as well as future demonstrations. More detailed information and a video from the workshop is available by logging onto [www.grc.nasa.gov/WWW/OptInstr/video.html](http://www.grc.nasa.gov/WWW/OptInstr/video.html).

## Marking a Decade of Center History



Photo by Hugh Aylward

C-1999-1155

May 7, 2009, marked the 10<sup>th</sup> anniversary of the center's renaming ceremony that honored Glenn Research Center's namesake John H. Glenn, an American hero, space pioneer and retired Ohio Senator. One of the original Mercury astronauts, Glenn became the first American and Ohio native to orbit the Earth when he piloted the Mercury Friendship 7 in 1962. Thirty-six years later, at age 77, he returned to space on shuttle Discovery's STS-95 mission. The public can view a tribute to our namesake in the John Glenn gallery created at the onsite Visitor Center (VC). The gallery includes photo exhibits, spacecraft models and his two spacesuits—the silver Mercury and the orange STS-95 launch and entry suit. A multimedia kiosk was recently added to the gallery, and offers detailed biographical information. The VC is open Monday through Sunday, free of charge.

## Tower Celebrates 65 Years of Contributions

For Len Tower, 85, research is his fountain of youth. On March 27, he celebrated a 65-year association with NASA that began in 1944 as a co-op student with the Aircraft Engine Research Laboratory.



Tower

The Thermal Energy Conversion Branch celebrated Tower's contributions during a luncheon on March 26. Much of Tower's work through the years has focused on power systems for aeronautics and space applications. He is currently modifying computer codes he wrote in the 1990s to assist in verifying the viability of fission surface power systems on lunar bases.

When Tower retired in 1979 with 35 years of service, he attended engineering classes at Cleveland State University to further hone his skills. He also taught Physics at Cuyahoga Community College. He worked for 8 years as a support service contractor for Glenn, and now contributes a few hours a week as a Distinguished Research Associate. Tower has published numerous technical reports along the way. He also finds time to exercise, garden and travel with his wife, Janice, of 43 years.

While some seniors work crossword puzzles, Tower says the constant challenge of research keeps him mentally alert. "Continually educating and challenging yourself mentally and physically with the things you love is the best prevention of Alzheimer's disease I can think of."

—BY DOREEN B. ZUDELL



## First Robotics

# Mentors Channel Student Energy for Positive Relationships

NASA Glenn engineers are helping channel a long-standing rivalry between two schools in the Berea City School District—Midpark High and Berea High—in a creative and productive way.

Over the past 6 years, these two teams have competed in the FIRST (For Inspiration and Recognition of Science and Technology) Robotics Competition. The mentor-based program builds skills, inspires innovation and encourages "gracious professionalism" among all participants.

"The FIRST Robotics Competition is a battle of creative minds with all the excitement of varsity sports," said John Wolter, Aeropropulsion Division, who mentors the Berea High team. "Students team with parents, faculty and professionals to design, build and program a robot—under real-world constraints—capable of performing a game strategy."

Wolter helps students design and construct Berea's robots from concept to competition. Kathleen Tacina, also in the Aeropropulsion Division, is a Midpark High mentor. She focuses on helping students program their robot.

"This year's student programmers already had 3 years of FIRST experience, so they worked more independently than last year," Tacina said.

Win or lose, the teams hold a joint banquet to celebrate the close of another FIRST season, honor individual awards and present the Robotics Grindstone Trophy to the team that is ranked highest at the end of the seeding rounds. The Grindstone Trophy holds relevance for both schools since Berea is known nationally as Grindstone Capital of the World.

Both teams competed in FIRST's Buckeye Regional in February. Midpark's team earned two significant victories: the Autodesk Visualization Award for excellence in student animation, and an invitation to the quarterfinals. However,

*Right: Wolters (in hat behind robot) with Berea High team. Below: Tacina (standing, far right) with Midpark team.*

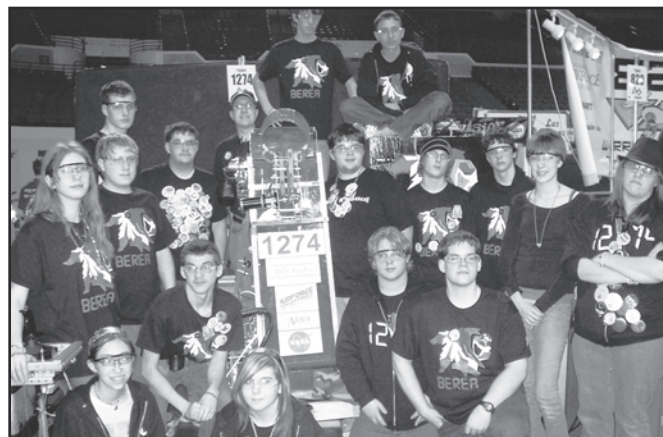


Photo by S. Jenise Veris



Courtesy of Midpark High School

Berea finished 47<sup>th</sup> at the end of the seeding rounds compared to Midpark's 51<sup>st</sup> ranking, so Berea earned the Robotics Grindstone Trophy.

Guided by the example of Wolter, Tacina and other team mentors, these students not only expand their technical horizons but also learn the value of friendly competition.

—BY S. JENISE VERIS

## Intergalactic Discovery Day at Glenn



Photo by Dennis Stocker

*Lindsey Flash, foreground, and Joan Emmett standing, left, were among 11 Glenn volunteers at the event.*

On March 21, NASA Glenn partnered with the Girl Scouts of North East Ohio (GSNEO) to present Intergalactic Discovery Day, a fun-filled astronomy and space exploration fair for Brownie and Junior Girl Scouts, ages 6–11. A centerwide team of 11 Glenn employees and 40 Girl Scout volunteers hosted over 200 girls and 100 adults who explored activities at nearly 20 stations that filled the Main Cafeteria—all designed to inspire interest in Science, Technology, Engineering and Mathematics (STEM). The event was enhanced by displays such as a solar system walk, spacesuit, Space Shuttle tire, Ares and Orion models and more assembled by Glenn's Exhibits Office. Some groups also toured the Visitor Center. Anyone interested in helping with future Girl Scout events should contact Dennis Stocker, 216-433-2166, Glenn's liaison to the GSNEO or Nancy R. Hall, 216-433-5643.

## People

**Bruce Banks (ALPH), Sharon Miller and Deborah Waters (ASRC)** in the Space Environment & Experiments Branch are the recipients of the 2009 Federal Laboratory Consortium (FLC) Award of Excellence in Technology Transfer, which was presented at the FLC National Meeting, May 7. The award honors laboratory employees (and their commercial partners) for outstanding achievement in advancing the mission of transferring federally developed technology to the marketplace. The Glenn team is honored for their work in Atomic Oxygen-Textured Surfaces for Blood Glucose Monitoring. *For nominations to the FLC and other NASA technology awards and incentives, contact Laurie Stauber, Technology Transfer & Partnership Office.*



*Banks*



*Miller*



*Waters*



*Patterson*

**Michael Patterson**, Power and In-Space Propulsion Division, and **Dr. John Foster**, former Glenn engineer and current associate professor in the University of Michigan's Nuclear Engineering and Radiological Sciences Department, have been awarded U.S. Patent 7,493,869 entitled "Very Large Area/Volume Microwave Electron Cyclotron Resonance (ECR) Plasma and Ion Source." Their invention is a combination of a device and methodology for producing very large area and large volume plasmas. It involves using electron cyclotron resonances with permanent magnets to produce dense,

uniform plasmas for long-life ion thruster applications or for plasma processing applications such as etching, deposition and ion milling and ion implantation.

**Michael Quintin**, an SAIC employee in the Safety, Health and Environmental Division, received the Silver Beaver Award from the Greater Cleveland Council of Boy Scouts of America on March 8. This is the highest award a council can present to a volunteer. Quintin has been an active Scout leader since 1986.



*Quintin*

## Calendar

**WALK AND HEALTH FAIR:** The annual 1.4 mile walk and health and safety fair is scheduled for Wednesday, May 20 from 10 a.m. to 2 p.m. Sign up outside the Employee Center to begin the walk. Contact your Directorate or Office to compete for the Golden Shoe Award for the highest percentage of participation. Door prize chances are available for all the walkers. The health and safety fair will take place in the upper level cafeteria.

**WOMEN'S RETIREE LUNCHEON:** The next Retired NASA Women's Luncheon will be held on May 21 at the 100<sup>th</sup> Bomb Group on Brookpark Road at noon. For reservations, call Gerry Ziemba at 330-273-4850. The August luncheon is planned for Don's Pomeroy House.

**ASIAN PACIFIC HERITAGE MONTH OBSERVANCE:** The month of May is National Asian Pacific Americans Heritage Month. The national theme is "Leadership to Meet the Challenge of a Changing World." Glenn will hold an observance on Thursday, May 23, from 10 a.m. to Noon in the Administration Building Auditorium. Dr. Norman Tien, dean of Case Western Reserve University's School of Engineering, is the keynote speaker. A cultural performance and cuisine sampling will follow. POC: May-Fun Liou, 216-433-3600.

**AFGE/IFPTE MEETING:** Local 28 will hold its next monthly membership meeting on Wednesday, June 10 at noon in the Employee Center.

## Attention Indians Fans !

Slider visited NASA Glenn in April to view our facilities and now he invites employees to

**NASA Night at Progressive Field**  
Cleveland Indians vs.

Cincinnati Reds

June 27, 7:05 pm

Upper Box Tickets: \$22.00

Upper Reserve Tickets: \$14.00

Order via a form at the  
NASA Exchange Store or  
Today@Glenn.

Order deadline is May 27

POC: David DeFelice at

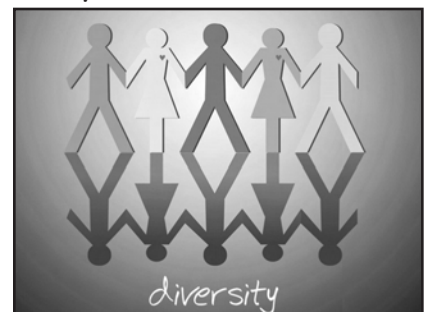
216-433-6186 or defelice@nasa.gov



**LLF BENEFIT GOLF OUTING:** Lewis Little Folks (LLF), Glenn's child development center, will host its annual benefit golf outing on Friday, June 19, at Springvale Golf Course, North Olmsted. Shotgun tee-off begins at 9 a.m. The cost is \$65 per golfer (\$20 tax deductible) and includes cart, 18-hole golf game, greens fee, breakfast, dinner, golf kit and prizes—including cash prizes! Entry deadline is May 22. POC: Kristin Ratino, 216-433-2048.

## New Faces Join Diversity Management Committee

Whether they are reviewing topics for future Diversity Leadership Guides, planning centerwide diversity events or identifying potential guest speakers, members of Glenn's Diversity Management Committee are working hard to reinforce the business case for diversity in the workplace. Earlier this year, five new members were added to the committee: Dr. Kul Bhasin, Sandra Buettner, Peter Klein, Paul Raitano and Linda Yavoich. For more information about the Diversity Management Committee, visit <http://www.grc.nasa.gov/WWW/diversity/diversitycouncil.htm>.





# In Memory

**Donald G.**

**Beremand, 83,** who retired in 1988 with 27 years of NASA service, died March 28. Beremand began his career working in the 8-by-6-Foot Supersonic Wind Tunnel followed

by assignments on a variety of dynamic power system technologies in the Power Technology Division. He was a member of the Stirling Engine Project Office and later became chief of the Stirling Technology Branch, the position he held prior to retirement. Beremand was an advocate of free-piston Stirling engines and had a number of patents on free-piston Stirling machines. The free-piston Stirling engine is currently under development as an advanced space power system for future NASA missions to deep space.

**Louis L. Corpas, 81,** who retired in 1990 with 39 years of federal service, died April 14. During his NASA career, Corpas served as Facilities Operations section head and worked in the Zero Gravity Facility. Corpas gained notoriety

translating the details of the design for David Gabriel's concept of the Multiple Axis Space Test Inertia Facility (MASTIF) into working hardware placed inside a vacuum chamber, converted from the old Altitude Wind Tunnel, to simulate the atmospheric conditions of space. The MASTIF, better known as the gimbal rig, was used to teach the seven Mercury astronauts how to bring a capsule tumbling in space under control. Corpas was an active member and officer of the Lewis Sportsman Club and Lewis Social Activities Committee.

**Angela M. Haferd, 89,** who retired in 2002 with 59 years of NASA service, died Nov. 8, 2008. Haferd was hired as a mathematics technician the same year the National Advisory Committee for Aeronautics (NACA) opened its Cleveland laboratory. Haferd and colleague S.S. Manson published a parameter formula in 1953 (aka "stress rupture" formula) that is still used in predicting the behavior of materials subjected to the extremes of heat and pressure when a space vehicle is passing through a planet's atmosphere. The formula was critical to developing the heat shield for Apollo astronauts and later in the Shuttle. It is internationally recognized as the best method for calculating "creep" in materials at high temperatures.

**Robert J. Horansky, 73,** who retired in 1997 with 39 years of NASA service, died March 26. Prior to retirement, Horansky worked in the Facilities & Test Engineering Division where he had served as chief of the Research Systems Engineering Branch. Horansky earned numerous Special Act/Performance Awards over his career. He is survived by NASA retiree Nancy Horansky, former secretary to Glenn (Lewis) Center Director Larry Ross.

**Charles M. "Chuck" Mehalic, 65,** who retired in 2000 with 34 years of NASA service, died in March. Despite his personal dislike of flying, Mehalic devoted his

career to perfecting aircraft engines for the nation. Mehalic was a member of the Engine Systems Branch and the Propulsion Systems Integration Group, as well as the Advanced Turboprop Project. He earned more than a dozen NASA awards, including a 1980 NASA Group Achievement award for the Engine Component Improvement Project and later a 1989 NASA Distinguished Paper Award.

**Richard W. Niedzwiecki, 70,** who retired in 1999 with 33 years of NASA service, died April 1. Niedzwiecki served as chief of the Combustion Technology



*Niedzwiecki*

Branch, where he oversaw efforts to improve the performance/combustion of aircraft engines. His work focused largely on reducing engine emissions and developing scientific bases for assessing its atmospheric

impacts through NASA's Atmospheric Effects of Aviation Project and High Speed Research Project Office. Niedzwiecki earned two patents and over a dozen NASA awards, including the prestigious NASA Exceptional Service Medal in 1980. He also published extensively at NASA and as a member of the Intergovernmental Panel on Climate Change, a Nobel-winning collaboration between the United Nations Environment Programme and the World Meteorological Organization, which plays a key role in defining and remediating threats due to global warming.

# In Appreciation

I want to thank everyone for all the wonderful cards, gifts and good wishes as well as the party for my retirement. I have many wonderful memories of the past 29 years at Lewis-Glenn and I will cherish all of them. Thanks again!

—*Blanche Preusser*

Thank you for kindness and prayers after the passing of my father. Your support is a refuge for me during this difficult time.

—*Doreen Zudell*

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DEADLINES: News items and brief announcements for publication in the June issue is noon, May 15. Larger articles require at least 1 month notice. Submit contributions to the editor via e-mail, doreen.b.zudell@nasa.gov, fax 216-433-8143, phone 216-433-5317 or 216-433-2888, or MS 3-11. Ideas for news stories are welcome but will be published as space allows. View us online at <http://aerospacefrontiers.grc.nasa.gov>.



*Horansky*

## Lean Six Sigma

# Workshops Focus on Eliminating Waste in Processes

Is paperwork getting in the way of your productivity? Employees in a workshop last month discovered that they could shave 5 hours off time they spent processing a manufacturing workorder by using the Lean Six Sigma business management strategy.

The 2-1/2-day workshop centered on the Lean Six Sigma methodology: a structured approach to identifying and eliminating waste while pursuing perfection in a process. Lean Six Sigma uses a five-step method to increase process speed, eliminate waste, reduce variation and improve customer satisfaction. Glenn and other NASA centers are embracing this method, which has been used successfully by many corporations.

Deputy Director of Center Operations Robyn Gordon championed bringing Lean Six Sigma training to Glenn in January. Center Director Dr. Woodrow Whitlow Jr. and 30 Glenn senior managers participated in the training to learn how this management strategy could make a

difference in the way we do business. They identified 23 initial areas within the center where this method could be successfully applied. Last month's workshop, comprising a cross section of civil servant and support service contract employees, tackled a few of those areas.

Kurt Brocone, Procurement Division, was part of a team that examined the distribution process of contract orders.

The team discovered by dedicating just a short timeframe to a specific issue, and having an opportunity to present their findings to senior staff, they could greatly reduce the process in terms of labor and paper. "We accomplished something quite significant in a short period of time," he said.



Photo by Mark Adrian



C-2009-1062

Photo by Bridget Caswell

*Above: In the recent workshop, Peter Tschen, chief of the Manufacturing Engineering and Process Branch, and his team identified waste and redundancies. Left: In January, teams practiced Lean Six Sigma principals by competing against one another to launch balls into a target area.*

According to Lean Six Sigma Lead Tom Spicer, chief of the Human Capital Development Branch, several workshops will be offered this summer. If you have a process that could benefit from using the Lean Six Sigma methodology, contact Kim Mordaunt at 3-8521.

—BY DOREEN B. ZUDELL

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